

IN THE CLAIMS:

Claims 1-147 (Cancelled)

Claim 148 (Currently amended) An occlusive device for use in interventional therapy and vascular surgery, adapted to be inserted into a portion of a vasculature, said occlusive device comprising:

at least four coil arms formed of shape memory material having a collapsed primary coil configuration and a three dimensional, polyhedral expanded secondary configuration, said coil arms having inner and outer ends, said inner ends of said coil arms being connected together, wherein said at least four coil arms are formed from conically shaped coils each having an inner apical end, and said inner apical ends being connected to said central body, said conically shaped coils having an expanding diameter as they radiate outward; and

a central coil body connected to said inner ends of said coil arms.

Claim 149 (Cancelled)

Claim 150 (Previously presented) The occlusive device of Claim 148, wherein said central body comprises a central three dimensional coil connecting said inner ends of said at least four coil arms together and said central three dimensional coil has a shape selected from the group consisting of spherical, rounded, and cubical shapes.

Claim 151 (Previously presented) The occlusive device of Claim 148, wherein said at least four coil arms comprise at least one multi-stranded micro-cable having a

plurality of flexible strands of a resilient material, with at least one radiopaque strand to provide a radiopaque marker.

Claim 152 (Previously presented) The occlusive device of Claim 148, wherein said at least four coil arms comprise at least one secondary wind coil of a primary helical wind coil.

Claim 153 (Currently amended) An occlusive device for use in interventional therapy and vascular surgery, adapted to be inserted into a portion of a vasculature, said occlusive device comprising:

at least four coil arms formed of shape memory material having a collapsed primary coil configuration and a three dimensional, polyhedral expanded secondary configuration, said coil arms having inner and outer ends, said inner ends of said coil arms being connected together, wherein said at least four coil arms are formed from conically shaped coils each having an inner apical end, and said inner apical ends being connected to said central body, said conically shaped coils having an expanding diameter as they radiate outward; and

a central coil body connected to said inner ends of said coil arms, The occlusive device of Claim 149, wherein said central body comprises a central three dimensional coil connecting said inner ends of said at least four coil arms together and said central three dimensional coil comprises a secondary wind coil of a primary helical wind coil.

Claims 154-164 (Cancelled)

Claim 165 (Previously presented) A device for use in interventional therapy and vascular surgery, adapted to be inserted into a portion of a vasculature, comprising:

a shape memory coil having an outer coil portion and an inner core portion, said shape memory coil having a primary, collapsed coil configuration and a secondary, expanded configuration with a three dimensional shape; and

a radiopaque strand having a plurality of intermittently spaced apart enlarged portions disposed within the outer coil portion.

Claim 166 (Previously presented) The device of Claim 165, wherein said shape memory coil comprises a multi-stranded coil having a plurality of flexible strands of a resilient material.

Claim 167 (Previously presented) The device of Claim 165, wherein said shape memory coil comprises a single stranded coil.

Claim 168 (Previously presented) The device of Claim 167, wherein said single stranded coil comprises a nickel titanium alloy.

Claim 169 (Previously presented) The device of Claim 167, wherein said single stranded coil comprises a shape memory polymer.

Claim 170 (Previously presented) The device of Claim 165, wherein said enlarged portions comprise a radiopaque material selected from the group consisting of platinum and gold.

Claim 171 (Previously presented) The device of Claim 165, wherein said enlarged portions comprise a plurality of beads of radiopaque material spaced apart and mounted on a core strand of material.

Claim 172 (Previously presented) The device of Claim 171, wherein said beads comprise a radiopaque material selected from the group consisting of platinum, gold and tungsten.

Claim 173 (Previously presented) The device of Claim 171, wherein at least one of said plurality of beads is bonded to a segment of the shape memory coil.

Claim 174 (Previously presented) The device of Claim 171, wherein said enlarged portions comprise a plurality of coils intermittently wound about and spaced apart on said core strand.

Claim 175 (Previously presented) The device of Claim 165, wherein at least one of said core strands comprises a radiopaque material selected from the group consisting of platinum and gold.

Claim 176 (Previously presented) The device of Claim 174, wherein said spaced apart coils comprise a radiopaque material selected from the group consisting of platinum and gold.

Claim 177 (Previously presented) The device of Claim 165, wherein at least one of said core strands comprise a material selected from the group consisting of platinum, gold, a shape memory polymer having a glass transition temperature (T_g) below 25° C, a hydrogel, an amorphous gel, and a fiber.

Claim 178 (Currently amended) An occlusive device for use in interventional therapy and vascular surgery, adapted to be inserted into a portion of a vasculature, said occlusive device comprising:

six coil arms formed of shape memory material having a collapsed primary coil configuration and a three dimensional, hexahedral expanded secondary configuration, said coil arms having inner and outer ends, said inner ends of said coil arms being connected together; and

a central coil body connected to said inner ends of said coil arms. ~~The occlusive device of Claim 148, wherein said at least four coil arms comprises six coil arms, and said polyhedral expanded secondary configuration is a hexahedral configuration.~~